

REMARKS

This is in response to the Official Action mailed October 10, 2001 for the above-captioned application. Reconsideration of the application, as amended, in view of the remarks herein is respectfully requested.

Claims 1-30, 32, 38 and 39 have been cancelled. Applicants reserve the right to pursue these claims in one or more continuation or divisional applications filed during the pendency of this application.

The Examiner rejected claims 29, 31 and 33 as anticipated by Houghton et al. (1993) and claims 29-33 as obvious over Houghton et al. in view of Ausubel. Applicants have amended claim 31 to independent form and to include the limitation of claim 32 (which was not rejected as anticipated). Applicants respectfully submit that the amended claims are not obvious over the cited combination of references.

The Examiner apparently recognizes that the Houghton et al. reference does not teach an insect cell line, but argues that since insect cell lines have been used to clone other systems, that the use of an insect cell line is in all cases obvious. Applicants respectfully disagree. In order to support an obviousness rejection, there must be a reason to combine the references, and to modify the teaching of the Houghton et al. reference to use insect cells instead of mouse cells. No such reason can be found in the cited references.

The Houghton et al. 1993 reference (which is a review article) mentions expression of human gp75 in mouse fibroblasts (L cells), and cites to reference 38 (Vijayasaradhi et al.), which is of record. This paper does not have a specific reference to cloning in mouse cells, but refers to cloning according to methods previously described. The reference cited in this case is Bouchard et al., *J. Exp. Med.* 169: 2029-42 (1989) which describes expression of human tyrosinase cDNA in mouse fibroblasts. The Examiner has not bridged the gap between these teachings of expression of a mammalian protein, in a mammalian cell line and the claimed insect cell lines.

It is noted that one of the concerns of the Bouchard reference is the ability to express melanosomal proteins in cells which lack melanosomes, and thus to provide a tool for studying the regulation, transport and processing of tyrosinase. The Examiner has not addressed why a person skilled in the art would not have even more substantial concerns when expressing the protein in a non-mammalian cell. The Examiner has not established or argued that insect cells would be expected to provide a suitable environment for studying the regulation, transport and processing of melanosomal proteins. The Examiner has not established or argued that insect cell lines would be expected to provide appropriate processing of melanosomal proteins to provide for such studies. In short, the Examiner has merely found the isolated elements of the claimed invention (using the claims being examined as a guide), and made a bare and unsupported allegation that substitution of insect cells for mouse fibroblasts would have been obvious. This is not sufficient to support a rejection under 35 USC § 103. *Ex Parte Hiyamizu*, 10 USPQ 2d 1393, 1394 (POBAI 1988). Thus Applicants respectfully submit that this application is in form for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marina T. Larson", followed by a long horizontal flourish.

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MARKED UP COPY OF AMENDED CLAIMS

31. A non-human cell line expressing a human differentiation antigen [The cell line of claim 29], wherein the human differentiation antigen is derived from human melanocytes and wherein the cell line is an insect cell line.